

CLAIMS

1. Device for compressing a list of destination addresses (A.B.C.D, A.B.C.E, A.F.G.H) of a multicast message comprising means to detect a common prefix
5 (A.B.C) in at least two destination addresses (A.B.C.D, A.B.C.E) of said list,

CHARACTERISED IN THAT said device for compressing further comprises means to generate a sequence of suffixes ((D,E)) of said at least two destination addresses (A.B.C.D, A.B.C.E), and means to constitute a compound destination address (A.B.C{D,E}), adapted to add said sequence of suffixes ((D,E)) to said
10 common prefix (A.B.C) to thereby constitute said compound destination address (A.B.C{D,E}).

2. Device for compressing according to claim 1,

CHARACTERISED IN THAT said list of destination addresses (A.B.C.D, A.B.C.E,
15 A.F.G.H) consists of Internet Protocol addresses.

3. Device for compressing according to claim 1,

CHARACTERISED IN THAT said list of destination addresses consists of Internet Protocol addresses and compound addresses similar to said compound
20 destination address.

4. Device for compressing according to claim 1,

CHARACTERISED IN THAT said list of destination addresses consists of compound addresses similar to said compound destination address.

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5. Device for compressing according to ^{claim 1} ~~any one of claims 1 to 4,~~

CHARACTERIZED IN THAT said device is incorporated in a host (H1) of a communications network (INTERNET) having connectionless multicast transmission capabilities.

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6. Device for compressing according to ^{claim 1} ~~any one of claims 1 to 4,~~

CHARACTERISED IN THAT said device is incorporated in a router (R1, R2, R3)
of a communications network (INTERNET) having connectionless multicast
5 forwarding capabilities.

7. Method for compressing a list of destination addresses (A.B.C.D, A.B.C.E,
A.F.G.H) of a multicast message whereby a common prefix (A.B.C) is detected in at
least two destination addresses (A.B.C.D, A.B.C.E) of said list,

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CHARACTERISED IN THAT further a sequence of suffixes ((D,E)) is generated
of said at least two destination addresses (A.B.C.D, A.B.C.E) and a compound
destination address (A.B.C(D,E)) is constituted by adding said sequence of suffixes
((D,E)) to said common prefix (A.B.C).

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8. Router (R1, R2, R3) of a communications network (INTERNET) having
connectionless multicast forwarding capabilities,

CHARACTERISED IN THAT said router (R1, R2, R3) incorporates a device for
compressing a list of destination addresses (A.B.C.D, A.B.C.E, A.F.G.H) of a multicast
message as defined by claim 1.

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9. Router (R1, R2, R3, R4) according to claim 8,

CHARACTERISED IN THAT said router (R1, R2, R3) further incorporates a
routing table memory and means to address said routing table memory via a
compound address similar to said compound destination address.

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10. Host (H1) of a communications network (INTERNET) having
connectionless multicast transmission capabilities,

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CHARACTERISED IN THAT said host (H1) incorporates a device for compressing a list of destination addresses (A.B.C.D, A.B.C.E, A.F.G.H) of a multicast message as defined by claim 1.

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